

# Claims

- [c1] 1. An invention comprising a method of managing finite data storage of a temporal data store comprising one or more data groups, each data group comprising a plurality of members, data of each of which is preserved in the finite data storage, each data group having associated therewith a time point and each member of each data group having associated therewith a preservation weight, the method comprising the step of, upon detecting that consumption of the finite data storage has reached a first level, then, in order of increasing preservation weight beginning with the one or more members having the lowest preservation weight, successively deleting each member in increasing chronological order beginning with the oldest member first, until the finite data storage consumption has reached a second level.
- [c2] 2. A computer-readable medium having computer-readable instructions for performing the method of claim 1.
- [c3] 3. A computer configuration comprising computer-readable medium having computer-readable instructions for performing the method of claim 1.

- [c4] 4. An invention comprising a method of managing finite data storage used to store data of snapshots, each snapshot having associated therewith a snapshot time and a preservation weight, the method comprising the step of, upon detecting that consumption of the finite data storage has reached a first level, then successively deleting snapshots as a function of the preservation weights and snapshot times until the finite data storage consumption has reached a second level.
- [c5] 5. The invention of claim 4, further comprising the step of managing a collection of snapshots of the same object, each snapshot being taken at a different point in time and having data preserved in a finite data storage, by deleting the oldest snapshot of the collection upon the addition of a new snapshot to the collection when the number of snapshots in the collection exceeds a predetermined maximum number.
- [c6] 6. A computer-readable medium having computer-readable instructions for performing the method of claim 4.
- [c7] 7. A computer configuration comprising computer-readable medium having computer-readable instructions for performing the method of claim 4.
- [c8] 8. A method in which data for multiple snapshots is

maintained without redundancy of preserved data for different snapshots in data storage, comprising:

- determining whether a granule of a volume requires caching prior to being overwritten; and
- a step for saving the granule of the volume prior to being overwritten if it needs caching.